

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	113250	("417").CLAS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/08/15 13:52
L2	2940995	(trench\$2 or channel\$1 or cavit\$2 or void\$1)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/15 12:54
L3	14446	1 and 2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/15 13:52
L4	2724409	"IC" or die or integrated\$1circuit\$1 or circuit\$2integrated or (integrated adj circuit\$1) or chip\$1	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/15 13:06
L5	2547	3 and 4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/15 13:53
L6	1040075	catal\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/15 13:07
L7	43	5 and 6	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/15 13:53
L8	358719	("257").CLAS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/08/15 13:52

## EAST Search History

L9	131390	8 and 2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/15 13:52
L10	81878	9 and 4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/15 13:53
L11	3195	10 and 6	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/15 13:53
L12	4094637	platinum or "Pt" or "Pb" or "lead"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/15 13:54
L13	2432	11 and 12	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/15 13:54
L14	1382110	(circulat\$3 or flow\$3 or pump\$3 or mov\$3) with (fluid\$3 or liquid\$1)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/15 13:56
L15	432	13 and 14	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/15 13:56
L16	15	("20020127736"   "20020163781"   "20030016498"   "20030030981"   "20030062149"   "20030164231"   "20040013536"   "5021924"   "5348076"   "5522452"   "5846396"   "6052284"   "6301109"   "6443704"   "6533554").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/15 15:11
L17	0	("6981849").URPN.	USPAT	OR	OFF	2006/08/15 15:15

## EAST Search History

S1	12695	((438/26) or (438/51) or (438/98) or (438/100) or (438/101) or (438/106) or (438/107) or (438/597) or (438/653) or (438/669) or (438/670) or (438/685) or (438/686) or (438/687) or (438/692)).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/07 19:48
S2	8803	((trench\$2 or channel\$1 or cavit\$2 or void\$1) near3 (substrate\$1 or wafer\$1)) same (bond\$3 or attach\$4 combin\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/06/26 17:48
S3	304	S1 and S2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/06/26 17:05
S4	5147	(trench\$2 or channel\$1 or cavit\$2 or void\$1) near5 ((catalyst near3 lin\$3) or catalyst)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/09 14:55
S5	0	S3 and S4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/06/26 17:15
S6	54	S2 and S4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/06/26 17:18
S7	20	S6 and (fluid near2 (circulat\$3 or flow or control\$4))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/06/26 17:41
S8	1	S7 and (copper near3 bond\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/06/26 17:26

## EAST Search History

S9	34	S6 not S7	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/06/26 17:41
S10	26	((trench\$2 or channel\$1 or cavit\$2 or void\$1) near3 (substrate\$1 or wafer\$1)) same (copper near3 bond\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/25 16:12
S11	1	("20040072039").PN.	US-PGPUB; USPAT	OR	OFF	2005/06/26 18:21
S12	1265	(wafer\$1 or substrate\$!) near10 abutment	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/07 19:03
S13	0	S12 and ("copper to copper" adj bond\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/07 18:53
S14	0	S12 and ("copper to copper" near10 bond\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/07 18:53
S15	0	S12 and ((copper adj to adj copper) near10 bond\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/09 14:54
S16	26	S12 and (copper near5 bond\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/07 18:54
S17	944	(wafer\$1 or substrate\$!) near5 abutment	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/07 19:04

## EAST Search History

S18	50	S17 same (trench\$2 or channel\$1)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/07 19:11
S19	11	("4426129"   "4578097"   "4709986"   "4896930"   "4904052"   "5263111"   "5333229"   "5366530"   "5465860"   "5770465"   "6097870").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2005/12/07 19:09
S20	70	S12 same (trench\$2 or channel\$1)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/07 19:11
S21	20	S20 not S18	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/07 19:11
S22	326	(438/667).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/07 19:53
S23	170	(438/411).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/01/10 18:14
S24	372	(438/406).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/07 19:58
S25	813	((trench\$2 or channel\$1 or cavit\$2 or void\$1) near3 wafer\$1) near5 (bond\$3 or attach\$4 combin\$3 or abut\$4))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/11 17:41

## EAST Search History

S26	1	S25 and ((trench\$2 or channel\$1 or cavit\$2 or void\$1) near5 catalyst)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/09 14:50
S27	1	("5262021").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2005/12/11 17:32
S28	1	S25 and ((trench\$2 or channel\$1) near10 catalyst)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/11 17:36
S29	32	S25 and catalyst	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/11 17:36
S30	781	S25 not S29	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/11 17:42
S31	5	("4977101"   "5145810"   "5296730"   "5320705"   "5326726").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2005/12/11 19:16
S32	25	("5719069").URPN.	USPAT	OR	OFF	2005/12/11 19:17
S33	3	("4624741"   "5264075"   "5310450").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2005/12/11 19:20
S34	2	("5425841").URPN.	USPAT	OR	OFF	2005/12/11 19:21
S35	4	("4706374"   "4930043"   "5006487"   "5068203").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2005/12/11 19:24
S36	9	("5369057").URPN.	USPAT	OR	OFF	2005/12/11 19:24
S37	1	("6861274").PN.	USPAT	OR	OFF	2006/01/09 13:28
S38	18	("20020158322"   "20030003619"   "20030038027"   "20030062149"   "20040101421"   "20040118689"   "6055003"   "6136212"   "6156651"   "6351274"   "6379870"   "6407006"   "6455130"   "6576896"   "6605454"   "6639712"   "6670022"   "6719535").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/01/09 13:28

## EAST Search History

S39	7	("5736424"   "5895263"   "5947027"   "6022812"   "6062133"   "6063714"   "6121130").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/01/09 13:50
S40	6	("6407006").URPN.	USPAT	OR	OFF	2006/01/09 14:47
S41	119518	(trench\$2 or channel\$1 or cavit\$2 or void\$1) near5 (abutment or align\$4 or (face adj to adj face) or combin\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/10 14:41
S42	0	S41 and ((copper adj to adj copper) near10 bond\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/09 14:54
S43	383	S41 and (copper near10 bond\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/10 19:50
S44	2	S43 and (trench\$2 or channel\$1 or cavit\$2 or void\$1) near5 ((catalyst near3 lin\$3) or catalyst)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/09 14:57
S45	5	S43 and (trench\$2 or channel\$1 or cavit\$2 or void\$1) near10 ((catalyst near3 lin\$3) or catalyst)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/10 14:39
S46	3	S45 not S44	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/09 14:57
S47	9	S43 and (trench\$2 or channel\$1 or cavit\$2 or void\$1) same ((catalyst near3 lin\$3) or catalyst)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/09 16:37

## EAST Search History

S48	6	S47 not S46	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/09 14:59
S49	10	("0465957"   "0568574"   "2084207"   "2120067"   "3419953").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/01/09 16:25
S50	0	("5839644").URPN.	USPAT	OR	OFF	2006/01/09 16:26
S51	14	((("6606251") or ("6285550") or ("6507492") or ("6861274") or ("6277629") or ("6234240") or ("5504924") or ("5763951") or ("6942018") or ("5420753") or ("5365400") or ("200401200827") or ("5361188") or ("4922377") or ("5844208")).PN.	US-PGPUB; USPAT	OR	OFF	2006/01/09 16:39
S52	19	((("6606251") or ("6285550") or ("6507492") or ("6861274") or ("6277629") or ("6234240") or ("5504924") or ("5763951") or ("6942018") or ("5420753") or ("5365400") or ("200401200827") or ("5361188") or ("4922377") or ("5844208") or ("5754399") or ("6366462") or ("6548894") or ("6449161") or ("6661661")).PN.	US-PGPUB; USPAT	OR	OFF	2006/01/09 17:32
S53	51	(integrat\$3 or connect\$3) near5 (re adj combin\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/09 17:35
S54	7	S53 and semiconductor	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/09 17:33
S55	15	integrat\$3 near10 (re adj combin\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/09 17:37



## EAST Search History

S56	5	(re adj combin\$3) near10 ((electroosmotic or kinetic) near3 pump\$1)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/09 17:40
S57	6	(re adj combin\$3) same ((electroosmotic or kinetic) near3 pump\$1)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/10 14:42
S58	1	S57 not S56	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/09 17:40
S59	26	(re adj combin\$3) near10 (electroosmotic or pump\$1)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/09 17:44
S60	111	(re adj combin\$3) same (electroosmotic or pump\$1)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/09 17:53
S61	85	S60 not S59	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/09 17:49
S62	10	(re adj combiner) same (electroosmotic or pump\$1)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/09 17:55
S63	18	(re adj combiner) and (electroosmotic or pump\$1)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/09 17:55

## EAST Search History

S64	8	S63 not S62	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/09 17:55
S65	71318	(trench\$2 or channel\$1 or cavit\$2 or void\$1) near10 ((catalyst near3 lin\$3) or catalyst or ("Pb" or lead) or ("Pt" or platinum))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/10 17:10
S66	7610	S65 and (trench\$2 or channel\$1 or cavit\$2 or void\$1) near5 (abutment or align\$4 or (face adj to adj face) or combin\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/10 14:51
S67	5	S66 and (re adj combiner) same ((electroosmotic near3 pump\$1) or pumpS1)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/10 14:47
S68	6	S66 and (re adj combiner)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/10 14:45
S69	1	S68 not S67	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/10 14:46
S70	15	S66 and ((electroosmotic near3 pump\$1) or pumpS1)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/10 14:51
S71	1937	S65 same (trench\$2 or channel\$1 or cavit\$2 or void\$1) near5 (abutment or align\$4 or (face adj to adj face) or combin\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/10 16:28

## EAST Search History

S72	8	S71 and (("IC" or (integrat\$3 near2 circuit\$1)) near5 cool\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/10 15:00
S73	8	S71 and (("IC" or (integrat\$3 near2 circuit\$1)) near10 cool\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/10 15:05
S74	0	S73 not S72	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/10 15:00
S75	752	S71 and (("IC" or (integrat\$3 near2 circuit\$1)) sane cool\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/10 15:01
S76	27	S71 and (("IC" or (integrat\$3 near2 circuit\$1)) same cool\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/10 15:01
S77	19	S76 not S73	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/10 15:02
S78	23	S71 and (((("IC" or (integrat\$3 near2 circuit\$1)) or die\$1 or chip\$1) near10 cool\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/10 19:57
S79	60	S71 and (((("IC" or (integrat\$3 near2 circuit\$1)) or die\$1 or chip\$1) same cool\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/10 15:14

## EAST Search History

S80	37	S79 not S78	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/10 15:14
S81	12885	(trench\$2 or channel\$1 or cavit\$2 or void\$1) near10 ((catalyst near3 lin\$3) or catalyst or "Pb" or ("Pt" or platinum))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/10 19:55
S82	227	S81 same (trench\$2 or channel\$1 or cavit\$2 or void\$1) near5 (abutment or align\$4 or (face adj to adj face) or combin\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/10 16:38
S83	5167	(trench\$2 or channel\$1 or cavit\$2 or void\$1) near10 ("Pb" or ("Pt" or platinum))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/10 17:17
S84	109	S83 same (trench\$2 or channel\$1 or cavit\$2 or void\$1) near5 (abutment or align\$4 or (face adj to adj face) or combin\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/10 17:18
S85	17	("5580435").URPN.	USPAT	OR	OFF	2006/01/10 16:43
S86	11	("3051631"   "3932264"   "4061560"   "4459198"   "4891120"   "4908112"   "5126023"   "5194133"   "5223114"   "5296114").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/01/10 16:51
S87	2	S84 and catalyst	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/25 16:07
S88	2833	(trench\$2 or channel\$1 or cavit\$2 or void\$1) near5 ("Pb" or ("Pt" or platinum))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/10 17:17

## EAST Search History

S89	80	S88 same (trench\$2 or channel\$1 or cavit\$2 or void\$1) near5 (abutment or align\$4 or (face adj to adj face) or combin\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/10 17:51
S90	1650	(438/424).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/01/10 17:51
S91	154	(438/422).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/01/10 18:15
S92	147	S91 not S90	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/10 18:15
S93	9	("4579621"   "4993143"   "5659138"   "5883420"   "5889872"   "5926721"   "6093330"   "6180480"   "6307247").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/01/10 18:20
S94	1	("6670257").URPN.	USPAT	OR	OFF	2006/01/10 18:31
S95	16	("4450472"   "4745760"   "4800422"   "4938742"   "4950181"   "5179043"   "5218515"   "5241450"   "5278103"   "5461003"   "5619177"   "5668398"   "5876187"   "5901037"   "5936295"   "6228744").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/01/10 18:34
S96	16	("4450472"   "4745760"   "4800422"   "4938742"   "4950181"   "5179043"   "5218515"   "5241450"   "5278103"   "5461003"   "5619177"   "5668398"   "5876187"   "5901037"   "5936295"   "6228744").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/01/10 18:43
S97	2	("6629425").URPN.	USPAT	OR	OFF	2006/01/10 18:44
S98	728079	"2" and (copper or (copper adj to adj copper) near2 bond\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/10 19:51

## EAST Search History

S99	2345	((trench\$2 or channel\$1 or cavit\$2 or void\$1) near3 (substrate\$1 or wafer\$1)) same (bond\$3 or attach\$4 combin\$3)) and (copper or (copper adj to adj copper) near2 bond\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/10 20:01
S10 0	2420	(trench\$2 or channel\$1 or cavit\$2 or void\$1) near10 ((catalyst near3 lin\$3) or catalyst or "Pb" or ("Pt" or platinum))and (copper or (copper adj to adj copper) near2 bond\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/10 19:56
S10 1	165	S99 and (((IC" or (integrat\$3 near2 circuit\$1)) or die\$1 or chip\$1) near10 cool\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/10 20:02
S10 2	136	((trench\$2 or channel\$1 or cavit\$2 or void\$1) near3 (substrate\$1 or wafer\$1)) same (bond\$3 or attach\$4 combin\$3)) and ((copper or (copper adj to adj copper)) near2 bond\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/10 20:01
S10 3	12	S102 and (((IC" or (integrat\$3 near2 circuit\$1)) or die\$1 or chip\$1) near10 cool\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/10 20:02
S10 4	1118924	cataly\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/25 16:10
S10 5	3006657	gas\$2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/25 16:11
S10 6	2928094	(trench\$2 or channel\$1 or cavit\$2 or void\$1)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/25 16:17

## EAST Search History

S10 7	71650	S104 and S105 and S106	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/25 16:26
S10 8	1377932	(circulat\$3 or flow\$3 or pump\$3 or mov\$3) with (fluid\$3 or liquid\$1)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/25 16:34
S10 9	23338	S107 and S108	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/25 16:36
S11 0	2714113	"IC" or die or integrated\$1circuit\$1 or circuit\$2integrated or (integrated adj circuit\$1) or chip\$1	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/25 16:39
S11 1	7581	S109 and S110	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/25 16:41
S11 2	4074808	platinum or "Pt" or "Pb" "lead"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/25 16:42
S11 3	4074808	platinum or "Pt" or "Pb" or "lead"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/14 15:22
S11 4	5796	S111 and S113	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/25 16:46

## EAST Search History

S11 5	6037090	protect\$3 or cover\$3 or assist\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/25 16:47
S11 6	5235	S114 and S115	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/25 16:48
S11 7	1705196	semiconductor\$1	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/25 16:48
S11 8	1673	S116 and S117	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/26 15:32
S11 9	1118924	cataly\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/26 15:32
S12 0	3006657	gas\$2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/26 15:32
S12 1	2928094	(trench\$2 or channel\$1 or cavit\$2 or void\$1)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/15 12:50
S12 2	71650	S119 and S120 and S121	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/26 15:32



## EAST Search History

S12 3	1377932	(circulat\$3 or flow\$3 or pump\$3 or mov\$3) with (fluid\$3 or liquid\$1)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/26 15:32
S12 4	23338	S122 and S123	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/26 15:32
S12 5	2714113	"IC" or die or integrated\$1circuit\$1 or circuit\$2integrated or (integrated adj circuit\$1) or chip\$1	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/26 15:32
S12 6	7581	S124 and S125	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/26 15:32
S12 7	4074808	platinum or "Pt" or "Pb" or "lead"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/26 15:32
S12 8	5796	S126 and S127	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/26 15:32
S12 9	6037090	protect\$3 or cover\$3 or assist\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/26 15:32
S13 0	5235	S128 and S129	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/26 15:32

## EAST Search History

S13 1	1705196	semiconductor\$1	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/26 15:32
S13 2	1673	S130 and S131	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/27 15:27
S13 3	1673	S132 and pd@<"20030924"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/26 15:38
S13 4	2290043	cool\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/27 15:26
S13 5	1119632	cataly\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/27 15:27
S13 6	3008114	gas\$2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/27 15:27
S13 7	2930359	(trench\$2 or channel\$1 or cavit\$2 or void\$1)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/14 15:20
S13 8	71781	S135 and S136 and S137	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/27 15:27

## EAST Search History

S13 9	1378671	(circulat\$3 or flow\$3 or pump\$3 or mov\$3) with (fluid\$3 or liquid\$1)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/15 13:55
S14 0	23375	S138 and S139	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/27 15:27
S14 1	2715823	"IC" or die or integrated\$1circuit\$1 or circuit\$2integrated or (integrated adj circuit\$1) or chip\$1	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/27 15:27
S14 2	7600	S140 and S141	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/27 15:27
S14 3	4077035	platinum or "Pt" or "Pb" or "lead"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/27 15:27
S14 4	5809	S142 and S143	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/27 15:27
S14 5	6041288	protect\$3 or cover\$3 or assist\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/27 15:27
S14 6	5248	S144 and S145	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/27 15:27

## EAST Search History

S14 7	1706242	semiconductor\$1	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/27 15:27
S14 8	1682	S146 and S147	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/27 15:43
S14 9	1061	S148 and S134	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/27 18:07
S15 0	3858	(recombin\$3 or re\$1combin\$3) with gas\$2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/27 18:06
S15 1	2290043	cool\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/27 18:07
S15 2	1119632	cataly\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/27 18:07
S15 3	3008114	gas\$2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/27 18:07
S15 4	2930359	(trench\$2 or channel\$1 or cavit\$2 or void\$1)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/27 18:07

## EAST Search History

S15 5	71781	S152 and S153 and S154	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/27 18:07
S15 6	1378671	(circulat\$3 or flow\$3 or pump\$3 or mov\$3) with (fluid\$3 or liquid\$1)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/27 18:07
S15 7	23375	S155 and S156	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/27 18:07
S15 8	2715823	"IC" or die or integrated\$1circuit\$1 or circuit\$2integrated or (integrated adj circuit\$1) or chip\$1	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/14 15:19
S15 9	7600	S157 and S158	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/27 18:07
S16 0	4077035	platinum or "Pt" or "Pb" or "lead"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/14 15:21
S16 1	5809	S159 and S160	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/27 18:07
S16 2	6041288	protect\$3 or cover\$3 or assist\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/27 18:07

## EAST Search History

S16 3	5248	S161 and S162	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/27 18:07
S16 4	1706242	semiconductor\$1	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/27 18:07
S16 5	1682	S163 and S164	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/27 18:07
S16 6	1061	S165 and S151	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/27 18:10
S16 7	26	S150 and S166	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/27 18:10
S16 8	18	("20020158322"   "20030003619"   "20030038027"   "20030062149"   "20040101421"   "20040118689"   "6055003"   "6136212"   "6156651"   "6351274"   "6379870"   "6407006"   "6455130"   "6576896"   "6605454"   "6639712"   "6670022"   "6719535"). PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/07/28 14:47
S16 9	0	("6861274").URPN.	USPAT	OR	OFF	2006/07/28 14:49
S17 0	101526	("165").CLAS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/08/14 15:39

## EAST Search History

S17 1	2723316	"IC" or die or integrated\$1circuit\$1 or circuit\$2integrated or (integrated adj circuit\$1) or chip\$1	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/15 13:06
S17 2	10658	S170 and S171	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/14 15:40
S17 3	2939674	(trench\$2 or channel\$1 or cavit\$2 or void\$1)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/14 17:31
S17 4	3685	S172 and S173	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/14 15:40
S17 5	1039722	catal\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/15 13:07
S17 6	112	S174 and S175	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/14 15:40
S17 7	4093415	platinum or "Pt" or "Pb" or "lead"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/14 17:38
S17 8	59	S176 and S177	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/14 15:41
S17 9	4	("20020184907"   "20030062149"   "20030164231"   "20040190252").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/14 15:31

## EAST Search History

S18 0	145298	("361").CLAS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/08/14 17:28
S18 1	36453	S180 and S171	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/14 15:40
S18 2	10129	S181 and S173	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/14 15:40
S18 3	298	S182 and S175	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/14 15:40
S18 4	222	S183 and S177	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/14 15:41
S18 5	240	S184 not9	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/14 15:41
S18 6	207	S184 not S178	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/14 15:41
S18 7	104511	("174").CLAS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/08/15 12:49



## EAST Search History

S18 8	2723316	"IC" or die or integrated\$1circuit\$1 or circuit\$2integrated or (integrated adj circuit\$1) or chip\$1	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/14 17:29
S18 9	19877	S187 and S188	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/14 17:29
S19 0	2939674	(trench\$2 or channel\$1 or cavit\$2 or void\$1)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/14 17:34
S19 1	6166	S189 and S190	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/14 17:34
S19 2	1039722	catal\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/14 17:37
S19 3	369	S191 and S192	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/14 17:37
S19 4	4093415	platinum or "Pt" or "Pb" or "lead"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/15 13:54
S19 5	237	S193 and S194	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/14 17:39